DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-002280
Date Inspected: 08-May-2008

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 630
OSM Departure Time: 1530
Location: Changxing Island

CWI Name:	See below	**CWI Present:**	☑ Yes ☐ No
Inspected CWI report:	☑ Yes ☐ No ☐ N/A	**Rod Oven in Use:**	☐ Yes ☑ No ☐ N/A
Electrode to specification:	☑ Yes ☐ No ☐ N/A	**Weld Procedures Followed:**	☑ Yes ☐ No ☐ N/A
Qualified Welders:	☑ Yes ☐ No ☐ N/A	**Verified Joint Fit-up:**	☑ Yes ☐ No ☐ N/A
Approved Drawings:	☑ Yes ☐ No ☐ N/A	**Approved WPS:**	☑ Yes ☐ No ☐ N/A
		Delayed / Cancelled:	☐ Yes ☑ No ☐ N/A

Bridge No: 34-0006
Component: Skin plates

Summary of Items Observed:

CWI Name: Xie Yan and Mr. Wei Jiam Bo

Submerged Arc Welding (SAW)process on skin plate (Tower bay#1): Caltrans Quality Assurance Inspector (QAI) observed three Zhenhua Port Machinery Co (ZPMC) welding operators performed semi-automatic SAW on the splice weld of ASTM 709 345 skin plate numbered P327A to P327B with 65mm wall thickness, weld# SSD1-SA159E/J-14B; skin plate numbered P262 to P267 with 45mm wall thickness, weld# SSD1-SA17A/G-17A and skin plate numbered P1272 to P212 with 45mm wall thickness; weld# SS01-SA179A/E-4A. The weld designed is a double -V-groove with welding conducted in the in flat position (1G) with proper 4.8mm diameter wire feed electrode JW3 and flux/J1-B, made by China Company and completed with approximate five pass. The parameters used for SAW welding of splice weld was conducted in accordance with Caltrans approved WPS-B-T-2221-B-U3. The semi-automatic SAW was monitored and recorded by ABF Certified Welding Inspector (CWI)Miss. Xie Yan and Mr. Wei Jiam Bo. Based on Caltrans QAI observations, no discrepancies were noted.

"Push down" Heat straightening on skin plate (Tower bay#1) Caltrans QAI observed few ZPMC heat straightening operators performed heat straightening with ZPMC Heat Straightening Report (HSR) on plate numbered P326S, P222B, P326N, P190A, P1028A, P223B, P329A and P389A. All the plates have been inspected and recorded by ZPMC QC within from 0.5mm to 1mm off set (Caltrans requirement Max 3mm) after heat straightening. Based on Caltrans QAI observation, no discrepancies were noted.

SAW process on skin plate (Tower bay#2): Caltrans QAI observed two ZPMC welding operators performed semi-automatic SAW on the splice weld of ASTM 709 345 skin plate numbered SA77 to P1564 with 45mm wall thickness; weld# ESD1-SA77A/E-33B and skin plate numbered P1274 to P132 with 45mm wall thickness, weld# SSD1-SA233A/E-2B. The weld designed is a double -V-groove with welding conducted in the in flat position

(1G) with proper 4.8mm diameter wire feed electrode JW3 and flux/J1-B, made by China Company and completed with approximate five pass. The parameters used for SAW welding of splice weld was conducted in accordance with Caltrans approved WPS-B-T-2221-B-U3. The semi-automatic SAW was monitored and recorded by ABF CWI Mr. Wang Cheng Jun and Mr. Yang Yi Heng Based on Caltrans QAI observations, no discrepancies were noted.

Summary of Conversations:

As Note within the report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Wahbeh Mazen (818)292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer